REMARKS

Applicant thanks the Primary Examiner for discussing the office action with Applicant's representatives via a telephonic conference on October 17, 2005. Although no agreement was reached, Applicant appreciated the opportunity to explain the present invention and the differences from the prior art.

Claims 1-46 are pending in the above-identified application. In the Office Action, Claims 1-16 and 20-46 were rejected and claims 17-19 were objected to. With this amendment, claims 37-40 have been amended.

35 U.S.C. § 112 Indefiniteness Rejection of Claims

Claims 3-9, 11, 25-32, 39, 40 and 43-44 were rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. More specifically, the Examiner asserted that various terms in claims 3, 11, 25, 39, 40, and 43 were indefinite. Applicants respectfully traverse this rejection.

In claims 3, 25, and 43, the Examiner asserts that the term "power limiting circuit" is purportedly indefinite. Applicant disagrees. The specification clearly explains a power limiting circuit and specifically identifies three different ways of constructing such a power limiting circuit (see p. 9, line 4 to p. 10, line 2). Accordingly, Applicant submits that the term "power limiting circuit", as used in claims 3, 25, and 43, is not indefinite, and respectfully requests that the 35 USC § 112 objection to these claims be withdrawn.

In claim 11, the Examiner asserts that the phrase "does not include a tank circuit" is purportedly indefinite. Again, Applicant disagrees. The term "tank circuit" is a common term used to identify a parallel resonant circuit containing only a coil and a capacitor. One common

use of tank circuits is to match the impedance of various circuits to one another. As explained in the specification, one advantage of the circuit according to the present invention is that it does not employ a tank circuit, thus reducing the costs of the circuit. (see p. 5, lines 1-4). An example of a tank circuit can also be found as circuit "F" (Col. 10, line 16 *et seq.*) in *Xia*, U.S. Patent No. 5,872,429 (already cited by the Examiner). Accordingly, Applicant submits that the phrase "does not include a tank circuit", as used in claim 11, is not indefinite, and respectfully requests that the objection to claim 11 be withdrawn.

In claim 39, the Examiner asserts that the phrase "configured with end of life protection" is indefinite. Although Applicant does not agree that this phrase is indefinite, Applicant has amended this claim to address the Examiner's concerns. Accordingly, the Applicant requests that the objection to claim 39 be removed.

In claim 40 , the Examiner asserts that the phrase "excessive symmetric lamp voltage will trigger port overload" is indefinite. Although Applicant does not agree that this phrase is indefinite, Applicant has amended this claim to address the Examiner's concerns. As amended, claim 40 recites that "the lighting system is configured to trigger a port overload upon detection of an excessive symmetric voltage in a lamp output voltage." One of ordinary skill in the art would understand that an alternating waveform may have two component, a symmetric (AC) component and an asymmetric (DC) component. In view of the commonly understood meaning of the term symmetric in the industry, Applicant believes that this claim is not indefinite. Accordingly, the Applicant requests that the objection to claim 40 be removed.

35 U.S.C. § 102 Anticipation Rejection of Claims

Claims 1-2, 10, 12-16, 20-24, 33-38, 41-42 and 45-46 were rejected under 35 U.S.C. § 102(b) as being anticipated by *Xia* (U.S. Patent No. 5,872,429). Applicants respectfully traverse this rejection.

Claim 1 recites "a power supply having a power supply input to receive a first signal having a first frequency, a circuit for converting the first signal to a second signal, and at least one power supply output to output the second signal." Claim 1 further recites that the second signal has "a substantially constant current and a second frequency distinctly higher than the first frequency."

The *Xia* reference discloses a lighting control communication method for encoding perturbations in a voltage signal. (See Abstract). As Applicant's representatives explained during the Oct 17, 2005 phone conference, *Xia* does not disclose any single signal that is both a substantially constant current signal and at a frequency that is substantially higher than a first signal received by the power supply. In fact, *Xia* does not disclose the use of constant current, at all. As discussed in *Xia* from Column5, line 65 to Column 6, lines 15 (emphasis added):

> The fluorescent lamp controller, or ballast, shown in Fig. 1 includes an EMI and triac damping filter "A" connected to full bridge input rectifier "B", which together convert an AC power line voltage into a rectified, filtered DC voltage at an output thereof. The pre-conditioner circuit "C" includes circuitry for active power factor correction, as well as for increasing and controlling the DC voltage from the rectifier circuit B, which DC voltage is provided across a pair of DC rails RL1, RL2. Circuit "D" is a ballast circuit for controlling operation of the lamp and includes a DC-AC converter, or inverter, "E", resonant tank output circuit "F" and controller "G" which controls the inverter. The inverter E is a half-bridge configuration which under control of the half-bridge controller, or driver, circuit G provides a high frequency substantially square wave output voltage to the output circuit F. ***The resonant tank output circuit F converts the substantially square wave output of the halfbridge into a sinusoidal lamp current.***

In fact, the parameter held constant in *Xia* is the DC voltage not the current. As explained:

> the ballast includes inputs for connection to an AC power supply for powering the ballast and lamp, via a two-wire connection to a remote controller which encodes dimming control signals via the coded communication technique described above. A ballasting stage has a pair of DC inputs at which a substantially ***constant*** DC ***voltage*** is received, ... A power supply circuit connected to the mains input terminals provides the substantially ***constant*** DC voltage to the ballasting stage. . . . . Additionally, since the DC ***voltage*** input to the inverter does not decrease significantly . . . but remains ***substantially constant***,

Xia, Column 4, lines 29-61 (emphasis added).

Accordingly, Applicant submits that independent claim 1 is allowable. For similar reasons, Applicant also submits that independent claims 23, 36, 41, and 46 are also allowable.

CONCLUSION

In view of the foregoing, Applicants submit that the application is in condition for allowance. Notice to that effect is requested.

Respectfully submitted,

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